

California Regional Water Quality Control Board
Santa Ana Region

Order No. R8-2004-0009
NPDES No. CA8000393
Waste Discharge Requirements
for
San Bernardino Valley Municipal Water District
Pilot Dewatering Program

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board), finds that:

1. On December 23, 2003, San Bernardino Valley Municipal Water District (hereinafter, SBVMWD or discharger) submitted a Report of Waste Discharge for continuing the discharge of extracted groundwater from the Pilot Dewatering Program (PDP) into either Reach 5, Reach 4, or Reach 3 of the Santa Ana River. The discharges are currently regulated under Waste Discharge Requirements Order No. 99-040, NPDES No. CA8000393, issued on March 5, 1999. Order No. 99-040 expired on March 1, 2004 but was not administratively extended.
2. The San Bernardino Valley Municipal Water District, City of Redlands, City of Riverside, City of San Bernardino Municipal Water District, Riverside County Flood Control and Water Conservation District, Riverside-Highland Water Company, San Bernardino County, and San Bernardino Valley Water Conservation District own and operate the PDP. The San Bernardino Valley Municipal Water District is the lead agency for the project.
3. The PDP includes 19 existing wells located within the southwestern portion of the Bunker Hill Basin, an area of historic high groundwater (AHHG). The wells are pumped to lower the water table to approximately 15 feet below the ground surface. A maximum of 25,000 acre-feet per year (average 22.3 mgd) is extracted and discharged into the Santa Ana River. The project spans approximately 15 miles of the Santa Ana River within Reach 3 and 4 and portions of Reach 5 in San Bernardino and Riverside Counties.
4. The purpose of the PDP is to mitigate public hazards such as damage due to flooding, risk of liquefaction and other adverse impacts associated with high groundwater, and to allow recharge of good quality water into the basin from natural sources by removing high groundwater from areas within the southwestern portion of the Bunker Hill Groundwater Basin.
5. Discharges from the PDP are intermittent, based on two factors. The first is the need to dewater (mitigate liquefaction) based on the given depth to groundwater in comparison to the dewatering goal of 15 feet below ground surface. The second is the operational status of the conveyance facilities and production wells owned and operated by the participating agencies.

6. The dewatered groundwater discharges into Santa Ana River through stormwater channels. The discharge outfalls are listed below:

Outfall No.	Latitude	Longitude	Description/Location
001	34°04'29"N	117°16'19"W	Mission Storm Drain outfall - Santa Ana river Reach 5
002	34°04'02"N	117°17'47"W	Blend Point A: Santa Ana River Reach 4 near San Jacinto Fault
003	34°03'12"N	117°18'51"W	Riverside-Highland Water Company Irrigation line: Santa Ana River Reach 4 via Reche Canyon Creek Confluence
004	33°59'27"N	117°23'35"W	Blend Point B and Springbrook Channel outfall: Santa Ana River Reach 3 near Mission Street Bridge
005	33°58'35"N	117°24'30"W	15 th Street Alternate: Santa Ana river Reach 3
006	33°58'07"N	117°26'03"W	Tava Line Storm Drain: Santa Ana River Reach 3 at Tequesquito Arroyo Confluence
007	33°58'07"N	117°26'11"W	Blend Point B (Alternate): Santa Ana River Reach 3 near Union Pacific Railroad Bridge
008	33°57'44"N	117°28'08"W	Jefferson Street Alternate: Santa Ana River Reach 3

7. To assure compliance with TDS limits in the Order, the discharger proposes to blend well waters that exceeds TDS limits with higher quality water.
8. A Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan identifies water quality objectives and beneficial uses for waters in the Santa Ana Region. The requirements contained in this Order are necessary to implement the Basin Plan.
9. The requirements contained in this Order are necessary to implement the Basin Plan.
10. The beneficial uses of Reaches 3, 4, and 5 (downstream of Orange Avenue in Redlands) of the Santa Ana River include:
- Agricultural supply,
 - Groundwater recharge,
 - Water contact recreation,
 - Non-contact water recreation,
 - Warm freshwater habitat,
 - Wildlife habitat, and
 - Rare, threatened or endangered species

11. Some wells discharge to East Twin Creek or Warm Creek. Both are tributaries of Reach 4 of the Santa Ana River. The intermittent beneficial uses of East Twin Creek and Warm Creek in the area of the discharges include:
 - a. Groundwater recharge,
 - b. Water contact recreation,
 - c. Non-contact water recreation,
 - d. Warm freshwater habitat, and
 - e. Wildlife habitat.
12. The discharges overlie the Bunker Hill I, Bunker Hill Pressure, Colton, and Riverside I and II Groundwater Subbasins. The beneficial uses of these subbasins include:
 - a. Municipal and domestic supply
 - b. Agricultural supply,
 - c. Industrial service supply, and
 - d. Industrial process supply.
13. Effluent limitations and national standards of performance established pursuant to Section 301, 302, 303(d), 304, and 306 of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
14. In accordance with Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.
15. The Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, and finds that these discharges are consistent with those provisions.
16. The Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Specifications

1. The discharge of wastes containing constituent concentrations in excess of the following limits at all outfalls is prohibited:

CONSTITUENT	MAXIMUM DAILY CONCENTRATION LIMIT
Total Suspended Solids	75 mg/l
pH	6.5-8.5 unit

2. The 12-Month Average flow-weighted total dissolved solids concentration of the discharge shall not exceed those specified for specific outfalls tabulated in the following table:

12-Month Average Concentration Limit for TDS (mg/L)	Limit Applies to Discharge Outfall No.
300	001
400	002 and 003
650	004
700	005, 006, 007, and 008

3. There shall be no visible oil and grease in the discharge.

B. Receiving Water Limitations

1. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or State Board, as required by the Federal CWA and regulations adopted thereunder.
2. The discharge shall not cause any of the following:
 - a. Coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses.
 - b. Taste or odor producing substances to be in the receiving water at concentrations which cause a nuisance or adversely affect beneficial uses.
 - c. The deposition of oil, grease, wax, or other materials in concentrations which result in a visible film or in the coating of objects in the receiving water, or which cause a nuisance or affect beneficial uses.

- d. The deposition of objectionable deposits along the receiving water or the bottom.
 - e. The depletion of the dissolved oxygen concentration below 5.0 mg/l.
 - f. The temperature of the receiving water to be raised above 90°F (32°C), during the period of June through October, nor above 78°F (26°C) during the rest of the year.
 - g. A change in the ambient pH levels more than 0.5 pH units.
 - h. The presence of radioactive materials in concentrations which are deleterious to human, plant or animal life.
 - i. The increase in the amount of suspended or settleable solids of the receiving waters that will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
 - j. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving waters. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species, and
 - k. The bioaccumulation of chemicals in aquatic resources to levels that are harmful to human health.
3. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

C. Provisions

- 1. This Order shall become effective upon its adoption. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Clean Water Act, or amendments thereto, that shall become effective 10 days after the date of adoption, provided the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator objects to its issuance, this Order shall not serve as a NPDES permit until such objection is withdrawn.
- 2. Neither the treatment nor the discharge of wastes shall create, or threaten to create, a nuisance or pollution as defined in Section 13050 of the California Water Code.
- 3. The discharger shall comply with Monitoring and Reporting Program No. R8-2004-0009 as issued by the Executive Officer. Revision of this monitoring and reporting program by the Executive Officer may be necessary to confirm that the discharger is in compliance with the requirements and provisions contained in this Order. Revisions may be made at any time during the term of this Order, and may include an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the

monitoring or the number and size of samples to be collected may be reduced back to the levels specified in the original monitoring and reporting program at the discretion of the Executive Officer.


4. This Order expires on April 1, 2009, and the discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations, not later than 180 days in advance of such expiration date. The Report of Waste Discharge shall serve as the application for issuance of new waste discharge requirements.
5. Order No. 99-040 is hereby rescinded.
6. Compliance with the 12-month average limit under Discharge Specifications A.2. shall be determined by the arithmetic mean of the last twelve monthly averages.
7. All discharges shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges to storm drain systems or other courses under their jurisdiction.
8. The discharger must comply with all of the terms, requirements and conditions of this Order. Any violation of this Order constitutes a violation of the California Water Code and may constitute a violation of the Clean Water Act and its regulations, and is grounds for enforcement action, termination of the order, revocation and reissuance of the order, denial of an application for reissuance of the order; or a combination thereof.
9. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
10. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any effluent limitations specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
11. This Order is not transferable to any person except after notice to the Regional Board. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act.
12. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.
13. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

14. The Regional Board, EPA, and other authorized representatives shall be allowed:
- a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to copy any records that are kept under the conditions of the order;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA.

D. Permit Re-Opening, Revision, Revocation, and Re-issuance:

1. This Order may be modified, revoked and reissued, or terminated for cause.
2. The Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharge.
3. This Order may be reopened to include effluent limitations for pollutants determined to be present in the discharge in concentrations that pose a reasonable potential to cause or contribute to violations of water quality standards.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on April 30, 2004.



Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. R8-2004-0009
NPDES No. CA8000393

for
San Bernardino Valley Municipal Water District
Pilot Dewatering Project

A. Monitoring Requirements

Monitoring shall be in accordance with the following:

1. All sampling and sample preservation shall be in accordance with the current edition of *"Standard Methods for the Examination of Water and Wastewater"* (American Public Health Association).
2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of May 14, 1999) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this monitoring and reporting program (M&RP). In addition, the Regional Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136. Unless otherwise specified herein, organic pollutants shall be analyzed using EPA method 8260, as appropriate, and results shall be reported with ML or PQL and MDL.
3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or EPA or at laboratories approved by the Executive Officer of the Regional Board.
4. All analytical data shall be reported with method detection limits (MDLs) and with identification of either practical quantitation levels (PQLs) or limits of quantitation (LOQs).
5. Laboratory data must quantify each constituent down to the Practical Quantitation Levels specified in Attachment "A". Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.
6. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
7. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

8. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Effluent samples shall be taken downstream of the last addition of waste to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters.
9. Whenever the discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
10. The discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Board at any time. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling, and/or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used, including any modification to those methods;
 - f. All sampling and analytical results, including
 - 1) Units of measurement used;
 - 2) Minimum reporting limit for the analysis (minimum level, practical quantitation level (PQL));
 - 3) Results less than the reporting limit but above the method detection limit (MDL);
 - 4) Data qualifiers and a description of the qualifiers;
 - 5) Quality control test results (and a written copy of the laboratory quality assurance plan);
 - 6) Dilution factors, if used; and
 - 7) Sample matrix type; and;
 - g. All monitoring equipment calibration and maintenance records;
 - h. All original strip charts from continuous monitoring devices;
 - i. All data used to complete the application for this general permit; and,
 - j. Copies of all reports required by this general permit.

11. The discharger shall deliver a copy of each monitoring report in the appropriate format to:

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

12. Monthly samples shall be collected on a representative day of the month.
13. Quarterly samples shall be collected in January, April, July, and October.
14. Annual samples shall be collected on February of each year.

B. Effluent Monitoring

1. A sampling station shall be established for each point of discharge. These stations shall be located where representative samples can be obtained before the discharge mixes with the receiving waters.
2. The following shall constitute the effluent monitoring program:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling & Analysis
Flow	Flow Meter	gpd	Daily
Suspended Solids	Grab	mg/l	Monthly
pH	Grab	pH Units	Monthly
Total Dissolved Solids	Grab	mg/l	Monthly
Nitrate (NO ₃)	Grab	mg/l	Monthly
Perchlorate	Grab	μg/l	Quarterly
Trichloroethylene (TCE)	Grab	μg/l	Quarterly
Tetrachloroethylene (PCE)	Grab	μg/l	Quarterly
Dibromochloropropane (DBCP)	Grab	μg/l	Quarterly
EPA Priority Pollutants Metals and Volatile Organics Portion (See attached list)	Grab	μg/l	Annually (see also B.4., below)

3. Sampling stations shall also be established so that representative samples of each source of blend water can be obtained. The following shall constitute the blend water monitoring program:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling & Analysis
Flow	Flow Meter	gpd	Daily
Total Dissolved Solids	Grab	mg/l	Monthly, whenever blend water is being discharged
Total Nitrogen	Grab	mg/l	Monthly, whenever blend water is being discharged

4. The monitoring frequency for those priority pollutants that are detected during the required annual monitoring at a concentration greater than fifty percent of the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only) as specified for that pollutant in 40 CFR 131.38¹) shall be accelerated to quarterly for one year following detection. To return to the annual monitoring frequency, the discharger shall request and receive approval from the Regional Board's Executive Officer or designee.

C. Reporting

Reporting shall be in accordance with the following:

1. All monitoring reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22 and shall be submitted under penalty of perjury. All reports shall be signed by either a principal executive officer or ranking elected or appointed official or a duly authorized representative of a principal executive officer or ranking elected or appointed official. A duly authorized representative of a principal executive officer or ranking elected or appointed official may sign the reports only if;
 - a. The authorization is made in writing by a principal executive officer or ranking elected or appointed official,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position), and

¹

See Federal Register / Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.

- c. The written authorization is submitted to the Regional Board.

Each person signing a report required by this Order or other information requested by the Regional Board shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate², and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. All reports shall be arranged in a tabular format to clearly show compliance or noncompliance with each discharge limitation.
3. One week before groundwater extraction and discharge are commenced, the discharger shall notify the Regional Board or its designated compliance officer by email and/or orally by telephone.
4. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report.
5. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharger into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Board by letter when compliance with the time schedule has been achieved.
6. Noncompliance Reporting
 - a. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided to the Executive Officer (909-782-4130) and the Office of Emergency Services (1-800-852-7550) orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

²

For the purposes of this certification the term "accurate" refers to the veracity of the information submittal and not to the performance characteristics of the measurement system.

- b. The Regional Board may waive the above required written report on a case-by-case basis.
7. Except for data determined to be confidential under Section 308 of the Clean Water Act (CWA), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential.
8. Monitoring reports shall be submitted by the 30th day of each month following the monitoring period. The monitoring reports shall cover the previous month's monitoring activities and shall include:
- a. The results of all laboratory analyses for constituents required to be monitored (see Section B. above),
 - b. The daily flow data,
 - c. A summary of the discharge activities (when and where discharge occurred, description of type of discharge, etc.) including a report detailing the discharger's compliance or noncompliance with the requirements of the general permit and discharge authorization letter, and
 - d. For every item where the requirements of the general permit and discharge authorization letter are not met:
 - 1) A statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and
 - 2) A timetable for implementing the proposed actions.
 - e. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report.

Ordered by _____



Gerard J. Thibeault
Executive Officer

April 30, 2004

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

April 30, 2004

STAFF REPORT

ITEM: 6

SUBJECT: Waste Discharge Requirements, San Bernardino Valley Municipal Water District, Pilot Dewatering Program, San Bernardino County, Order No. R8-2004-0009, NPDES No. CA8000393

DISCUSSION:

On December 23, 2003, the San Bernardino Valley Municipal Water District (SBVMWD) submitted an application for renewal of its waste discharge requirements for discharges of blended well water associated with their Pilot Dewatering Program (PDP) in the Area of Historical High Groundwater (AHHG) in the southwestern portion of the Bunker Hill Groundwater Basin. These discharges are currently regulated under Order No. 99-40, NPDES No. CA8000393.

The PDP includes facilities owned and operated by the San Bernardino Valley Municipal Water District, City of Redlands, City of Riverside, City of San Bernardino Municipal Water District, Riverside County Flood Control and Water Conservation District, Riverside-Highland Water Company, San Bernardino County, and San Bernardino Valley Water Conservation District. San Bernardino Valley Municipal Water District is the lead agency for the project.

The PDP is operated along approximately 15 miles of the Santa Ana River within Reach 3 and 4 and portions of Reach 5 in San Bernardino County and Riverside County, between the AHHG (upstream boundary) and the Prado Flood Control Reservoir (downstream boundary).

The PDP is intended to: (a) lower the water table within the Bunker Hill Groundwater Basin AHHG to a minimum of 15 feet below the ground surface by pumping a maximum of 25, 000 acre-feet per year from the AHHG; (b) eliminate damage due to flooding; (c) lessen damage and injury as the result of liquefaction during a significant seismic event; and (d) allow recharge of good-quality water into the basin from natural sources.

Discharges from the PDP are intermittent, based on two factors. The first is the need to dewater (mitigate liquefaction) based on the given depth to groundwater in comparison to the dewatering goal of 15 feet below ground surface. The second is the operational status of the conveyance facilities and production wells owned and operated by the participating agencies.

The PDP uses existing water production and conveyance facilities in the AHHG. Groundwater is pumped from existing production wells in the AHHG. Short segments of pipelines connect the

wells to the existing storm drainage system. Existing flood control/storm drainage channels are used to convey the extracted groundwater to the Santa Ana River.

The location of discharge to the Santa Ana River is contingent on Total Dissolved Solids (TDS) quality. When the water meets basin plan requirements for TDS, the extracted groundwater is discharged into existing flood control channels that discharge to Reach 5 of the Santa Ana River. When the water can not meet basin plan requirements for TDS in Reach 5, the extracted groundwater is discharged into existing flood control channels that discharge to Reach 4 of the Santa Ana River. Because this Reach of the Santa Ana River overlies the Colton groundwater subbasin, which lacks TDS assimilative capacity, the discharge must meet the subbasin objective of 400 mg/l TDS. If necessary, the extracted groundwater can be blended with water from other sources to assure compliance with this TDS requirement. Water for blending is obtained from other wells and/or from the existing San Bernardino Valley Water Conservation District's water capture facilities in the Santa Ana River and Mill Creek. Discharge from these water capture facilities is normally diverted to groundwater recharge basins within the river and the creek. For use in conjunction with the dewatering project, a portion of the water that is normally diverted to these capture facilities is instead metered and immediately re-discharged to the river or the creek. The Conservation District's Santa Ana River water capture facility is located where Greenspot Road crosses the River. Water from this facility travels downstream to the blend point in Reach 4 of the Santa Ana River near the San Jacinto Fault. The Mill Creek water capture facility is located on the south side of Mill Creek Wash, approximately ½ mile east of Garnet Road in Mentone. Water is discharged back to Mill Creek at this location, where it flows downstream to the confluence with the Santa Ana River, continuing downstream to Reach 4 of the River, also near the San Jacinto Fault. Up to approximately 25 cubic feet per second (cfs) of blend water is discharged in order to provide approximately 21 cfs of blend water at the blending point near the San Jacinto Fault.

For discharges tributary to the Springbrook Channel, which is a soft bottom channel and which overlies the Riverside II Groundwater Subbasin, the applicable Basin Plan TDS objective is 650 mg/l. Consequently, the average annual flow-weighted total dissolved solids concentration of discharges via the Springbrook Channel is limited to 650 mg/L.

When high-quality blend water is not available for blending, the extracted groundwater is conveyed via the Riverside Canal downstream to outfalls in Reach 3 of the river where discharge requirements allow higher TDS discharges without exceeding 700 mg/l.

The discharge outfalls to the Santa Ana River are as follows:

001. Mission Storm Drain outfall: Santa Ana River Reach 5, latitude 34°04'29"N, longitude 117°16'19"W.
002. Blend Point A: Santa Ana River Reach 4 near San Jacinto Fault, latitude 34°04'02"N, longitude 117°17'47"W.
003. Riverside-Highland Water Company Irrigation line: Santa Ana River Reach 4 via Reche Canyon Creek Confluence, latitude 34°03'12"N, longitude 117°18'51"W.
004. Blend Point B and Springbrook Channel outfall: Santa Ana River Reach 3 near Mission Street Bridge, latitude 33°59'27"N, longitude 117°23'35"W.

- 005. 15th Street Alternate: Santa Ana River Reach 3, latitude 33°58'35"N, longitude 117°24'30"W.
- 006. Tava Line Storm Drain: Santa Ana River Reach 3 at Tequesquito Arroyo Confluence, latitude 33°58'07"N, longitude 117°26'03"W.
- 007. Blend Point B (Alternate): Santa Ana River Reach 3 near Union Pacific Railroad Bridge, latitude 33°58'07"N, longitude 117°26'11"W.
- 008. Jefferson Street Alternate: Santa Ana River Reach 3, latitude 33°57'44"N, longitude 117°28'08"W.

The 15th Street Alternate and Jefferson Street Alternate are proposed to be added for diversions from the Tava Lane storm drain during operational "down time" for maintenance or repairs.

The discharges are to Reach 3, 4, and 5 of the Santa Ana River. The beneficial uses of these reaches of the River include agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and rare, threatened or endangered species. The discharge overlies the Bunker Hill I, Bunker Hill Pressure, Colton, and Riverside I and II Groundwater Subbasins. The beneficial uses of these groundwater subbasins include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

The discharge limitations in the proposed Order should be adequate to protect the beneficial uses of the affected receiving waters.

RECOMMENDATION:

Adopt Order No. R8-2004-0009, NPDES No. CA8000393, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt

U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch

U.S. Fish and Wildlife Service, Carlsbad

State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon

State Water Resources Control Board, Division of Water Quality - James Maughan

State Department of Water Resources, Glendale

State Department of Fish and Game, Long Beach

State Department of Health Services, San Bernardino

Riverside County Environmental Health Department - Sandy Bunchek

Riverside County Flood Control and Water Conservation District – Jason Uhley

San Bernardino County Department of Environmental Health Services

San Bernardino County Flood Control Department, Water Conservation Division - Naresh Varma

San Bernardino Valley Municipal Water District – Bob Reiter

City of Redlands – Doug Headrick

City of Riverside, public works – Dieter Wirtzfeld

City of San Bernardino Municipal Water Department – Bernie Kersey

Riverside County Flood Control and Water Conservation District -

Riverside-Highland Water Company – Don Hough

San Bernardino Valley Water Conservation District – Lawrence Libeu

Orange County Water District – Nira Yamachika

Albert A. Webb & Associates - Sam I. Gershon

Orange County Coastkeeper – Garry Brown

Lawyers for Clean Water C/c San Francisco Baykeeper

San Bernardino Valley Municipal Water District Pilot Dewatering Program for delivery to Orange County Water District (NPDES Permit CA8000393 Renewal)

Facilities by Owner

- San Bernardino Valley Municipal Water District Well
- City of Redlands Well
- San Bernardino Municipal Water Department Wells
- County of San Bernardino Wells
- Riverside Highland Water Company Wells
- City of Riverside Wells
- City of Riverside Recorder Station

Conduits by Facilitating Agency

- City of Redlands
- City of Riverside
- City of San Bernardino
- ROFCWCD
- Riverside Highland Water Company

Path of Primary Operation

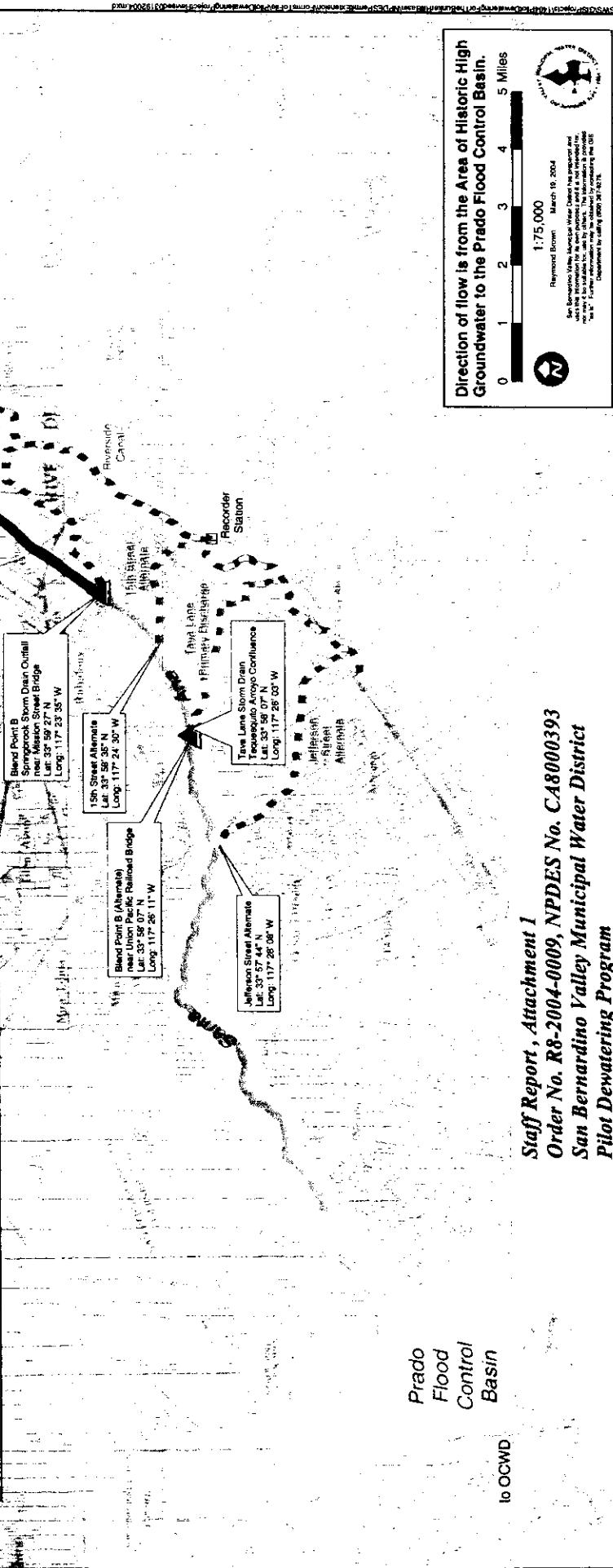
Santa Ana River Reaches (with TDS Objective*)

- Three (700 mg/l)
- Four (550 mg/l)
- Five (300 mg/l)

Blend Points

Area of Historic High Groundwater

* Per the RWQCB Water Quality Control Plan, 1995.



Direction of flow is from the Area of Historic High Groundwater to the Prado Flood Control Basin.

0 1 2 3 4 5 Miles

1:75,000

March 19, 2004

San Bernardino Valley Municipal Water District the Department of Public Works and Engineering and the City of San Bernardino and the City of Redlands are pleased to provide this map. The information is provided for informational purposes only and does not constitute a warranty or representation of the City of San Bernardino or the City of Redlands.

Staff Report, Attachment 1
Order No. R8-2004-0009, NPDES No. CA8000393
San Bernardino Valley Municipal Water District
Pilot Dewatering Program

Prado
Flood
Control
Basin
to OCWD



California Regional Water Quality Control Board

Santa Ana Region



Terry Tamminen
Secretary for
Environmental
Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
(909) 782-4130 • Fax (909) 781-6288
<http://www.swrcb.ca.gov/rwqcb8>

Arnold Schwarzenegger
Governor

May 11, 2004

Robert L. Reiter, General Manager & Chief Engineer
San Bernardino Valley Municipal Water District
P.O. Box 5906
San Bernardino, CA 92412

TRANSMITTAL OF ADOPTED ORDER NO. R8-2004-0009

Dear Mr. Reiter:

At the regular Board Meeting held on April 30, 2004 the Regional Board adopted Order No. R8-2004-0009. A certified copy is enclosed for your records.

Sincerely,

CATHERINE EHRENFELD
Staff Services Analyst

Enclosure: Adopted Order No. R8-2004-0009

- c. State Water Resources Control Board, Division of Water Quality, James Maughan
United States Environmental Protection Agency, WTR 5, Permits Section, Doug Everhardt

/cae